

REMARKS

By this amendment, no claims have been amended, canceled, or added. Claims 1-17 are pending in the application. Applicants reserve the right to pursue the original claims and other claims in this and other applications.

Claims 1-13, 16, and 17 stand rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is respectfully traversed.

Claim 1 recites, *inter alia*, “wherein the metal wiring layers are arranged such that they may not transmit a signal to another element of the semiconductor integrated circuit device that is arranged in the same horizontal plane as the heat conduction part.” The Office Action states that “[t]his limitation is not seen in the embodiments shown in FIGS. 2 and 4, where it appears that metal layer M2 would transmit a signal between the gates of adjacent elements.” (Office Action, page 2). Applicant respectfully submits that this limitation is not indefinite, because the specification affirmatively teaches that metal layer M2 shown in FIGS. 2 and 4 is not part of the heat conduction part.

For example, the limitation is supported by the specification at least at FIG. 2 and paragraph [0070], which states that “the heat conduction part 33 comprises the metal wiring layers M3, M4, M5 and M6 and the via layers 23, 25, 27 and 29 in the region A.” The specification at paragraph [0070] further states that “the heat conduction part 33 is connected to the gate electrode 13 via the components for signal transmission: the contact layer 19, the metal wiring layer M1, the via layer 21 and the metal wiring layer M2.” Therefore, the specification affirmatively teaches that the metal wiring layer M2 is not part of the heat conduction part 33, but instead is a component for signal

transmission connecting the heat conduction part 33 to the gate electrode 13. The above limitation is also supported at least by heat conduction part 35 and heat conduction part 37 shown in FIGS. 2 and 4, which are described in paragraphs [0071] and [0074], respectively, and heat conduction part 55 shown in FIGS. 7A and 7B, which is described in paragraphs [0092]-[0093].

Claims 10 and 16 contain limitations similar to those contained by claim 1 and are similarly supported by the specification and allowable for similar reasons. Applicants respectfully submit that claims 1-13, 16, and 17 are not indefinite and request that the rejection of these claims be withdrawn.

Claims 1-13, 16, and 17 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,919,235 ("Yamazaki"). This rejection is respectfully traversed.

Claim 1, as amended, recites, inter alia, "a plurality of metal wiring layers spaced apart from each other and arranged in a vertical stack, and a plurality of metal via layers connected to the metal wiring layers and coupling the metal wiring layers with each other, wherein the metal wiring layers are arranged such that they may not transmit a signal to another element of the semiconductor integrated circuit device that is arranged in the same horizontal plane as the heat conduction part." Yamazaki does not disclose this limitation.

The Office Action issued September 21, 2005 cites the "black mask 609" shown by Yamazaki in FIG. 9 as being a heat conduction part. However, the black mask 609 of Yamazaki is produced by forming and patterning a metallic film (column 14, lines 59-62). This manufacturing process results in a black mask 609 made up of a metallic film formed as one solid layer and conforming to the shape of the second interlayer

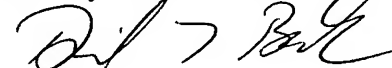
insulating film 607 (Fig. 9, No. 607; column 11, line 25). Therefore, because the black mask 609 is a metallic film formed as one solid layer, it is necessarily made up of only one layer of metal and cannot be construed to "include a plurality of metal wiring layers spaced apart from each other and arranged in a vertical stack" as recited by claim 1. Furthermore, because the black mask 609 is one layer of metal, it does not include "a plurality of metal via layers connected to the metal wiring layers and coupling the metal wiring layers with each other" as is recited by claim 1.

Independent claims 10 and 16 contain limitations similar to claim 1 and are allowable at least for reasons similar to those discussed with regard to claim 1. Since Yamazaki does not disclose all the limitations of claims 1, 10, and 16, claims 1, 10, and 16 are not anticipated by Yamazaki. Claims 2-9 depend from claim 1 and are patentable at least for the reasons mentioned above. Claims 11-13 depend from claim 10 and are patentable at least for the reasons mentioned above. Claim 17 depends from claim 16 and is patentable at least for the reasons mentioned above. Applicants respectfully request that the 35 U.S.C. § 102(e) rejection of claims 1-13, 16, and 17 be withdrawn.

In view of the above remarks, Applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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